

REMARKS

In the Office Action, the Examiner rejected claims 1-2, 4-5, and 7 under 35 U.S.C. 103 as obvious under U.S. Patent 6,907,314 (Negishi) in view of WO 01/54108 (Liang) in further view of U.S. Patent Pub. 2001/0043178 (Okuzono). Applicants respectfully traverse. In the interest of efficiently furthering prosecution, Applicants have amended claim 7, canceled claims 1-2, 4-5, and 8, and present new claims 10-12. No new matter has been added. Following entry of these papers, claims 7, 9, and 10-12 will remain pending in this application.

The Examiner rejected claims 1-2, 4-5, and 7 under 35 U.S.C. 103 as obvious under U.S. Patent 6,907,314 (Negishi) in view of WO 01/54108 (Liang) in further view of U.S. Patent Pub. 2001/0043178 (Okuzono). Claim 7 as amended recites “transferring a charge applied to a selected row n to a storage capacitor for only a first period of time and then transferring the charge remaining on the selected row to a reference potential in the case of a transition from the selected row n to another row $n+1$; connecting the storage capacitor to the another row $n+1$ to transfer a charge to the another row $n+1$ ”. Support for any amendments is found in at least paragraph 11 of the present application, as well as in the figures. On page 3-4, the Examiner describes a charge sharing disclosed by Liang, and on page 9 states that “the Examiner believes that it would be obvious to one of ordinary skill in the art to combine the specific method of charge sharing provided by Liang.” The method of charge sharing provided by Liang, however, is different than the method of charge sharing described above by claim 7. Liang discloses two electrodes with charges changing in opposite directions, and discloses a method with two different storage capacitors that are each separately charged to an initial voltage level corresponding to a row voltage, coupling the capacitors together, and transferring charge from each of the two capacitors to a second row. Finally, as disclosed by Liang, a drive phase occurs where a charging row is charged to a final voltage level. The method of claim 1 only uses a single capacitor, which allows charging of a second row regardless of whether a passive or active matrix

display is involved. The method of Liang would not function at video imaging display rates due to a poor response time.

Additionally, neither Negishi nor Okuzono cure these deficiencies of Liang.

Claim 7 further recites “transferring a charge applied to a selected row n to a storage capacitor for only a first period of time and then subsequently transferring the charge remaining on the selected row to a reference potential in the case of a transition from the selected row n to another row $n+1$ ”.

Neither Negishi nor Liang disclose the above recitation of claim 1. On page 5 of the present Office action, the Examiner states that paragraphs 57-76 and Figs. 3 and 5 of Okuzono cure the deficiencies of Negishi and Liang by disclosing this recitation of claim 1.

Figs. 3 and 5 of Okuzono, as well as Figs 7-8 and 10 each disclose a timing diagram related to a single drain/row/control line and two gate/column/data lines. FIG. 3, for example, shows a rise in the voltage of the single drain/row/control line as related to pulses STB, VCK, AND /VOE (See Okuzono paragraphs 60-63). Further, FIG. 3 describes the related rise in a first gate/column/data line related to the drain/row/control line (See Okuzono paragraph 64), and describes how a timing A may created the appearance of horizontal stripes as related to VCK, STB, /VOE, and the single drain/row/control line rise (See Okuzono paragraphs 65-68 and FIG. 4). Finally, FIG. 3 shows a waveform transition between the two gate/column/data lines, and a falling transition for the second gate/column/data line and the single drain/row/control line (See Okuzono paragraphs 69-76).

Each figure of Okuzono only shows a single drain/row/control line, and there is no teaching, suggestion, or disclosure of any relationship between the single drain/row/control line and any other drain/row/control lines. Further, there is no teaching, suggestion, or disclosure in Okuzono of any intermediate charge on the single drain/row/control line, or of any charge sharing between drain/row/control lines. By way of contrast, claim 1 recites that the draining discussed above is a draining from an

intermediate drain point, and that a charge used from the intermediate drain point is used to charge a connected row. Okuzono does not discuss any intermediate charge or charge sharing as disclosed by the above recitation of claim 1.

Therefore, Applicants respectfully submit that the combination of Negishi, Liang, and Okuzono does not disclose all of the recitations of claim 1, and the rejection under 35 U.S.C. should be withdrawn.

Additionally, claim 11 includes recitations similar to those of claim 7 discussed above, and claims 9-10 and 12 depend from claims 7 and 11. As such, Applicants respectfully submit that they are allowable over the cited art for at least the reasons discussed above.

Further, Applicants respectfully submit that there is no basis for combining Liang with additional art to arrive at the recitations of claim 1, because Liang specifically teaches away from the above recitation of claim 1. Throughout Liang, reference is made to two signals which are “undergoing opposite voltage transitions”, and every disclosure teaches and suggest that these occur at the same time (See, e.g.: Liang p. 4 lines 12-20, p. 5 lines 6-16, p. 9 lines 24-33, Figs. 2, 3, 5-7, and 10-11, as well as other places throughout Liang). Page 2 line 25 through page 3 line 9 of the present application specifically describes and distinguishes the disclosure of Liang from the present application. Therefore, Applicants respectfully submit that there is no basis for combining Liang with additional art to achieve the recitation of claim 1 above.

Conclusory Remarks

In view of the above, it is respectfully submitted that claims 7, 9, and 10-12 are allowable and are now in condition for formal allowance, and early and favorable action to that end is respectfully requested.

The Examiner is encouraged to call Applicants' attorney at the number below if doing so will in any way advance prosecution of this application.

The Commissioner is hereby authorized to charge any fees which may be required, or credit in the overpayment, to Deposit Account No. **07-1896** referencing Attorney Docket No. **348162-982380**.

Respectfully submitted,

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